PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Jack W. Adoline, et al.
For	:	DAMPENED COMPRESSION SPRING ROD
Serial No.	:	10/820,280
Filing Date	:	April 8, 2004
Examiner	:	Mariano Ong Sy
Gr. Art Unit	:	3657
Our Docket	:	BGEE 2 00017

REPLY BRIEF

Mail Stop Appeal Brief - Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

This Reply Brief is being filed by Appellant in response to the Answer mailed on July 7, 2009.

The examiner in Section 9 of the Answer set forth the basis for rejecting claims 1-32, 49-62, 72-76 and 84-96, which are the subject of this appeal. This basis for the rejection appears to be identical to the basis for the claims rejection set forth in the Final Office Action mailed October 2, 2008.

Section 10 on Pages 10 to 18 of the Answer represents the response by the examiner to the arguments for patentability of the pending claims argued by Appellant in the Appeal Brief.

Appellant's comments to this response by the examiner is set forth below.

I. FIRST ISSUE

A. INDEPENDENT CLAIMS 1 AND 49

1. The examiner asserted on Page 11 of the Examiner's Answer that Salice discloses a guide member designed to move into engagement with or to move to a position closely adjacent to the top bushing when the rod member moves to the fully extended position.

Figure 1 of Salice discloses a piston rod 9 in the fully extended position. Salice discloses that a piston 7 is connected to the end of piston rod 9. As such, piston 7 is the only structure in Salice that would be equivalent to the guide member defined in independent claims 1 and 49.

The top bushing defined in independent claims 1 and 49 is required to be positioned at least closely adjacent to the top end of the housing. Independent claims 1 and 49 also required the top bushing to include an opening to enable a portion of the rod member to pass therethrough and to support the rod member for reciprocation axially of the housing between retracted and extended positions relative thereto. Independent claims 1 and 49 also require the top bushing 80 to include a sealing arrangement that is positioned at least closely adjacent to the bottom of the top bushing, and the sealing arrangement is designed to inhibit fluid from entering into and escaping from the internal chamber between the top bushing and the top end of the housing. As such, independent claims 1 and 49 defined a specific structure, location and function of the top bushing.

The only structure disclosed in Salice that piston 7 contacts or moves closely adjacent there to when the piston rod 9 is in the fully extended position is guide bushing 10. Guide bushing 10 is not illustrated or disclosed as having a sealing arrangement that is positioned at least closely adjacent to the bottom of the top bushing. Indeed, Figure 2 illustrates that air bubbles and/or oil can flow

through or about the bottom portion so as to cause tube-section like part 35 to compress. Reference number 28 appears to be associated with an unknown part that is likely a bushing. However, there is no discussion of reference number 28 in Salice.

Appellant submits that guide bushing 10 of Salice does not have the same structure and function of the top bushing defined in independent claims 1 and 49, thus guide bushing 10 cannot be an equivalent structure to the top busing of the pending claims. As such, Appellant maintains that Salice disclose not disclose or make obvious the limitation of independent claims 1 and 49 of a guide member designed to move into engagement with or to move to a position closely adjacent to the top bushing when the rod member moves to the fully extended position.

2. The examiner asserted on Page 11 of the Examiner's Answer that Salice discloses a guide member that has a passageway that is fully spaced from an outer edge of the guide member.

Independent claims 1 and 49 require that the guide member includesa first passageway that at least partially regulates fluid flow between the at least two sub-chambers during the reciprocation of the rod member and that the first passageway is spaced from an outer edge of the guide member.

As established above, piston 7 is the only structure in Salice that would be equivalent to the guide member defined in independent claims 1 and 49. The examiner asserted that Figures 3 and 4 of Salice disclose that piston 7 includes a first passageway that is spaced from an outer edge of the guide member. Figure 4 illustrates that piston 7 has a borehole section 20 that is in fluid communication with radial boreholes 21. Radial boreholes 21 open on the outer edge of piston 7. Figures 3 and 4 also illustrate an axial borehole 19 that is in fluid communication with radial borehole 21. Figure 4 illustrates that the top of axial borehole 19 extends to groove 18. Groove 18

extends between two outer edges of piston 7. Appellant can only assume that the examiner is referring in isolation to borehole section 20 and axial borehole 19 when asserting that the limitation of independent claims 1 and 49 is disclosed in Salice. However, since radial boreholes 21 intersect with borehole section 20, there can be no passageway through piston 7 that is isolated from the outer edge of the piston. Furthermore, even if the examiner's assertion that borehole section 20 and axial borehole 19 should be taken in isolation, groove 18 connects to axial borehole 19, thus the fluid flow through borehole section 20 and axial borehole 19 is still not isolated from the outer edge of the piston. As such, Appellant maintains that Salice does not disclose or make obvious the limitation of independent claims 1 and 49 of a guide member that has a passageway that is fully spaced from an outer edge of the guide member.

3. The examiner asserted on Page 11 of the Examiner's Answer further justification for combining the teachings of Johnston with Salice. Appellant maintains that Johnston discloses a very different spring system from Salice for the reasons set forth in the Appeal Brief. Johnston and Salice are two different springs that are designed to solve different problems and to achieve different results. The examiner still has not justified why one skilled in the art would want to modify Salice with the teachings of Johnston. The examiner's linear force justification does not make sense since Johnston discloses in Figure 22 a non-linear force system as shaft 116 moves from a fully extended to a fully compressed position.

4. The examiner asserted on Page 11 of the Examiner's Answer that Fitzlaff discloses the top bushing that includes a sealing arrangement that is positioned at least closely adjacent to the bottom of the top bushing. The examiner does not dispute that structures 4 and 11 of Fitzlaff are the only sealing structures on the top section of the knee joint. However, the examiner

asserts that the these sealing structures are positioned at least closely adjacent to the bottom of the top bushing. Figure 1 of Fitzlaff establishes otherwise.

Appellant maintains that independent claims 1 and 49 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

B. DEPENDENT CLAIMS

The examiner asserted on Pages 12 and 13 of the Examiner's Answer that Johnston teaches the use of two compression springs. Appellant maintains that Johnston is a very different spring system from the spring systems of Salice and Fitzlaff for the reasons set forth in the Appeal Brief. As such, Appellant maintains that one skilled in the art would not modify the spring system of Salice as asserted in the examiner in the Final Office Action based on the teachings of Johnston and Fitzlaff. The examiner's assertions regarding the sealing arrangement in Fitzlaff are erroneous for the reason previously set forth above and in the Appeal Brief.

Appellant maintains that dependent claims 5, 10, 11, 13, 27, 29, 31, 50, 57, 60 and 74-76 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

II. SECOND ISSUE

The examiner asserted on Pages 13 and 14 of the Examiner's Answer that Johnsen teaches the use of two different types of compression springs. Appellant maintains that Johnsen, like Johnston, is a very different spring system from the spring systems of Salice and Fitzlaff. As such, Appellant maintains that one skilled in the art would not modify the spring system of Salice as asserted in the examiner in the Final Office based on the teachings of Johnsen, Johnston and Fitzlaff.

Appellant maintains that dependent claims 2, 6, 8, 12 and 72 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

III. THIRD ISSUE

The examiner asserted on Page 14 of the Examiner's Answer that Geyer teaches one compression spring having a different free length from a second compression spring. Dependent claim 84 includes the limitation that the first and/or second compression springs is in a partially compressed state when the rod member is in the fully extended position. The examiner again has not addressed this limitation. The mere fact that two compression springs are different lengths does not result in one or both of the compression springs being in a partially compressed state when the rod member is in the fully extended position. Appellant maintains that Salice, Johnston, Fitzlaff and Geyer do not disclose or teach the limitation of dependent claim 84 for the reasons set forth above and in the Appeal Brief.

Appellant maintains that dependent claims 3, 73 and 84 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

IV. FOURTH ISSUE

The examiner asserted on Page 15 of the Examiner's Answer that dependent claims 4, 7 and 9 are obvious over Salice in view of Johnston, Fitzlaff, Johnsen and Geyer. Appellant maintains that these claims are not obvious in view of the cited references for the reasons set forth in the Appeal Brief.

V. FIFTH ISSUE

The examiner asserted on Pages 16 and 17 of the Examiner's Answer that dependent claims 14, 17, 18, 22, 23, 51-56, 58, 59, 61, 62, 87, 90 and 93-96 were obvious over Salice in view of Johnston, Fitzlaff and Miura.

Appellant acknowledges that Miura discloses a spring 8; however, Appellant maintains that Miura is absent any disclosure or teachings regarding 1) a guide member that is designed to move into engagement with or moved to a position closely adjacent to the top bushing when the rod member moves to a fully extended position, 2) a top bushing that includes a sealing arrangement positioned at least closely adjacent to a bottom of the top bushing, and 3) a second passageway in a guide member that has a maximum flow rate that is less than the maximum fluid rate of a first passageway in the guide member.

The examiner on pages 16 and 17 has taken two contrary positions. The examiner first states that Miura does disclose a second passageway in a guide member that has a maximum flow rate that is less than the maximum fluid rate of a first passageway in the guide member. The examiner refers to the check valve and orifice of Miura as support for this assertion. The examiner then asserts that Miura is silent as to this limitation, but that does not matter since such limitation is not critical. Appellant is not aware that all novel limitations must be critical. Indeed, most dependent claims would be considered option limitations to the invention defined in the independent claim. Appellant notes that the examiner has cited no authority for rejecting a limitation or ignoring a limitation because the examiner does not deem the limitation critical.

The examiner also asserted that it is well known in the art that a check valve has a greater flow rate than an orifice. Appellant is not aware of such a fact. Appellant asserts that the size of the orifice and the size of the check valve would be the determining factor as to flow rates.

Appellant maintains that dependent claims 14, 17, 18, 22, 23, 51-56, 58, 59, 61, 62, 87, 90 and 93-96 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

VI. SIXTH ISSUE

The examiner asserted on Page 17 of the Examiner's Answer that dependent claims 15, 16, 19-21, 24-26, 28, 30, 32, 88, 89, 91 and 92 were obvious over Salice in view of Johnston, Fitzlaff, Johnsen and Miura. Appellant maintains that dependent claims 15, 16, 19-21, 24-26, 28, 30, 32, 88, 89, 91 and 92 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

VII. SEVENTH ISSUE

The examiner asserted on Pages 17 and 18 of the Examiner's Answer that dependent claims 15, 16, 19-21, 24-26, 28, 30, 32, 88, 89, 91 and 92 were obvious over Salice in view of Johnston, Fitzlaff, Miura and Geyer.

The examiner asserted that Geyer teaches two compression springs with different lengths. As set forth above, the mere fact that two compression springs are different lengths does not result in one or both of the compression springs being in a partially compressed state when the rod member is in the fully extended position. Appellant maintains that Salice in view of Johnston, Fitzlaff, Miura and Geyer do not disclose or teach the limitation of dependent claims 85 and 86 for the reasons set forth above and in the Appeal Brief.

Appellant maintains that dependent claims 15, 16, 19-21, 24-26, 28, 30, 32, 88, 89, 91 and 92 are not obvious over the cited art for the reasons set forth above and in the Appeal Brief.

VIII. SUMMARY

Appellant resubmits that the claims on appeal pertain to a novel spring system and novel method of using the spring system and that none of the pending claims on Appeal are obvious in view of the cited art of record. Appellant respectfully requests that the rejection of the claims be

withdrawn and that such claims be indicated as allowable.

Respectfully submitted,
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